

# 大学院特別セミナー

題 目： Pathway Illumination for Disease Research-  
Psychiatric Disorders and Antidepressant  
Treatment Response

演 者： Prof. Chris W. Turck, PhD

Proteomics and Biomarkers

Max Planck Institute of Psychiatry, Munich, Germany

日 時： 平成27年7月23日（木） 17:00~18:30

場 所： 基礎医学研究A棟1階 第一カンファレンス室

要旨： Biosignatures are critical for monitoring therapy response and stratifying patient groups in clinical trials. We are using proteomics and metabolomics platforms combined with pathway analysis for biosignature discovery in mouse models for anxiety, schizophrenia and posttraumatic stress disorder. Quantitative mass spectrometry with <sup>15</sup>N-labeled tissue specimens as reference material is used to identify differences in protein expression levels that are complemented with metabolomics data for subsequent *in silico* analyses of affected pathways in specific brain regions.

Another focus of our pathway discovery efforts has been the antidepressant treatment response. We have studied antidepressants that target the monoaminergic system to identify downstream pathways relevant for the actual therapeutic response and to reveal novel drug targets. More recently we have extended our investigation to a fast acting antidepressant that targets the glutamatergic system.

In an extension of our studies in mice we have also analyzed CSF patient specimens in an attempt to complement DSM-based clinical information with molecular biosignatures for more precise patient group stratification.

精神疾患のプロテオミクス解析に関する最新の話題です。

本講演は、医科学教育部「先端医学特論」に該当します。大学院生の来聴を歓迎します。

連絡先：病態生理学分野 六反一仁（内線2241）